

REMARKS

Reconsideration of this application as amended is respectfully requested.

In the Office Action, claims 1-4 and 6-62 are pending. Claims 1-4 and 6-62 stand rejected. In this response, no claims have been amended. No new claims have been added. No claims have been canceled. Thus, claims 1-4 and 6-62, remain pending.

Examiner Interview

Applicants thank the Examiner for the courtesy of the telephone interview on May 23, 2007, in which the claim limitations “determining a type of physical communication link” included in claims 1, 21 and 41 were discussed.

Rejections under 35 U.S.C. § 103(a)

Claims 1-3, 6, 9-11, 19-22, 26, 31, and 37-40 stand rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent No. 7,020,881 to Takahashi et al (hereinafter “Takahashi”) in view of UPnP Device Architecture (hereinafter “UPnP”). However, Applicants respectfully submit that Applicants’ claims 1-3, 6, 9-11, 19-22, 26, 31, and 37-40 are not obvious over the cited references.

Specifically, independent claims 1 and 21 include the limitation “determining a type of physical communication link between a digital camera device and a host device currently connected to establish a communication session”. It is respectfully submitted that neither Takahashi nor UPnP, individually or in combination, teach or suggest the noted limitations.

The Office Action correctly points out that Takahashi fails to disclose “determining a type of physical communication link” (Office Action, Page 3). However, the Office Action asserts that “UPnP device architecture teaches ... including determining a type of physical communication link information ... (See pages 7-8, Discovery advertisement, See page 13-15, Description and pages 50-51, Presentation)” (Office Action , Page 3). It seems that the Office Action alleges UPnP discloses the claim limitation “determining a type of physical communication link” according to the teachings provided in pages 7-8, 13-15 and 50-51 of UPnP. Applicants respectfully disagree.

UPnP describes an architecture for pervasive peer-to-peer network connectivity leveraging internet components based on wire protocols that are declarative, expressed in XML and communicated via HTTP (UPnP, page 1). According to UPnP, a protocol stack is used layered on top of IP (UPnP, page 2). The protocol stack includes a UPnP device architecture layer with UPnP-specific protocols to host messages including vendor information and vendor content at higher layers to be ultimately delivered over IP (UPnP, page 2).

Thus, in accordance with the UPnP architecture, IP connections have to be established before carrying out UPnP protocols. Additionally, UPnP describes discovery messages using a subset of the overall UPnP protocol stack layered on top of IP (UPnP, page 7). UPnP also discusses retrieving a UPnP device description and a UPnP service description by issuing HTTP GET requests on the URL in a discovery message (UPnP, page 14). UPnP further discusses retrieving a presentation page as a simple HTTP-based process using a subset of the overall UPnP protocol stack delivered via HTTP over TCP over IP (UPnP, page 50). Clearly, UPnP discloses protocols above IP layer. In fact, UPnP has to rely on bridging to accommodate media running non-IP protocols (UPnP, page 1). However, nowhere does UPnP teach or suggest determining a type of physical communication link.

Further, Takahashi is related to system control of multimedia devices (Takahashi, col. 1, lines 19-22). In Takahashi, a control device is provided for controlling a network device connected to a network (Takahashi, col. 1, lines 63-66). UPnP, however, relates to peer-to-peer network connectivity (UPnP, page 1). It is clear that a control device and a network device controlled by the control device cannot be considered peers. Thus, Takahashi teaches away from UPnP, and UPnP cannot be logically incorporated into Takahashi.

Furthermore, the references, considered as a whole, do not suggest the desirability and thus the obviousness of making the combination. It would be impermissible hindsight to combine Takahashi and UPnP based on Applicants' own disclosure.

Furthermore, even in combination, Takahashi and UPnP do not teach or suggest "determining a type of physical communication link," and performing certain steps based on the physical communication link type, as discussed above.

Therefore, in view of the foregoing remarks, it is respectfully submitted that independent claims 1 and 21 are patentable over Takahashi and UPnP. Given that dependent claims 3, 6, 9-11, 19-20, 22, 26, 31, and 37-40 depend from one of independent claims 1 and 21 and incorporate the above noted limitations, Applicants respectfully submit that dependent claims 3, 6, 9-11, 19-20, 22, 26, 31, and 37-40 are not obvious over the combination of references for at least the same reasons enumerated above with respect to claims 1 and 21.

Claims 4 and 17-18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Takahashi in view of UPnP, further in view of US Patent No. 6,628,325 to Steinberg et al. (hereinafter, "Steinberg"). However, Applicants respectfully submit that Applicants' claims 4 and 17-18 are patentable over the cited references.

Claims 4 and 17-18 depend from independent claim 1 and therefore incorporate the limitations of claim 1. It is respectfully submitted that the addition of Steinberg does not remedy the shortcomings of UPnP and Takahashi discussed above, and that therefore the references, individually or in combination, fail to disclose or suggestion the above noted limitations of claim 1.

Steinberg teaches a communication device for interconnecting a digital camera to a communication network for downloading data to a remote computer (Steinberg, col. 2, lines 40-42). Steinberg teaches that the device has a network communication port for establishing communication with a network and a camera communication port, such as serial, parallel, SCSI, USB or IrDA-port, for connection to a digital camera (Steinberg, col. 2, lines 42- 48). Steinberg teaches the communication device programmed to query the camera communication port to determine if a camera is connected (Steinberg, col. 10, lines 61-64). Steinberg teaches the communication device sending instructions, including downloading an image data, to a connected camera (Steinberg, col. 11, lines 12-13, Fig. 7). Steinberg teaches the communication device checks the output (network communication) port to determine if a connection is made to a network and if the destination is connected and ready (Steinberg, col. 11, lines 24-29). However, nowhere does Steinberg disclose or suggest determining a type of physical communication link between a digital camera device and a host device currently connected to establish a communication session

Thus, none of the references alone or in combination teach or suggest the limitation of "determining a type of physical communication link between a digital camera device and a host device currently connected to establish a communication session," and performing certain steps based on the physical communication link type as recited in claim 1. Since claims 4 and 17-18 depend from independent claim 1, for at least the reasons similar to those discussed above, it is respectfully submitted that claims 4 and 17-18 are patentable over the cited references.

Claims 7-8 and 16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Takahashi in view of UPnP, further in view of US Publication No. 2003/0142215 to Ward et al. (hereinafter "Ward"). However, Applicants respectfully submit that Applicants' claims 7-8 and 16 are patentable over the cited references.

Claims 7-8 and 16 depend from independent claim 1 and therefore incorporate the limitations of claim 1. It is respectfully submitted that Ward does not remedy the shortcomings of Takahashi and UPnP, and therefore for reasons similar to those discussed above, the references individually or in combination, fail to disclose or suggestion the above noted limitations of claim 1.

Ward teaches steps to transmit images using a network configuration file generated at a host computer and downloaded to a digital camera (Ward, [0004], [0014]). Ward also discloses if there is a request to send an image, the user ensures a camera is connected to the appropriate service (wired telephone line, cellular phone, kiosk, etc.) and the camera uses an appropriate network configuration file to establish communications with the service (Ward, [0014], Fig. 2). Ward describes selecting a service from a menu of online services or names of ISP (Ward, [0015]), such as Cellular, CDPD, Phone, Satellite, Ethernet, Kiosk and ISDN (War, Fig. 2). Ward further states a camera reads connection parameters from a network configuration file, dial a phone and establishes a connection to a service; transmits the user's account name and password to the service; and transmits images to the destination service using FTP (Ward, [0016]-[0018]). However, nowhere does Ward disclose or suggest determining a type of physical communication link between a digital camera device and a host device currently connected to establish a communication session.

Therefore, the references alone or in combination do not teach or suggest the above noted limitations of claim 1. Since claims 7-8 and 16 depend from independent claim 1, for at least the reasons similar to those discussed above, it is respectfully submitted that claims 7-8 and 16 are patentable over the cited references.

Claims 13-15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Takahashi in view of UPnP, further in view of US Patent No. 5,737,491 to Allen et al. (hereinafter "Allen"). However, Applicants respectfully submit that Applicants' claims 13-15 are patentable over the cited references.

Claims 13-15 depend from independent claim 1 and therefore incorporate the limitations of claim 1. It is respectfully submitted that Takahashi, UPnP, for reasons similar to those discussed above, or Allen, individually or in combination, fail to disclose or suggest the above noted limitations of claim 1.

Allen teaches a system for digital images capture and transmission, including a digital camera, a transceiver in the digital camera for transmitting a digital image file to a remote image fulfillment server, the digital image file having associated information for controlling the image fulfillment server. The image fulfillment server includes a transceiver for receiving the digital image file and control signals (Allen, col. 1, lines 35-52, Fig. 1). Allen teaches the fulfillment server reads the image file header including I.D. of the camera, command flags and the digital voice data. Command flags that are set indicate effects of action (Allen, col. 4, lines 55-60). Allen teaches the digitized voice data stored in the file header is recognized by comparing to a text code book, and when a match is made, the commands are executed (Allen, col. 5, lines 14-17). However, Allen fails to disclose or suggest determining a type of physical communication link between a digital camera device and a host device currently connected to establish a communication session.

Thus, none of the references alone or in combination teach or suggest the above noted limitations of claim 1. Since claims 13-15 depend from independent claim 1, for at least the reasons similar to those discussed above, it is respectfully submitted that claims 13-15 are patentable over the cited references.

Claims 23-25, 29-30 and 32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Takahashi in view of UPnP, further in view of Steinberg. However,

Applicants respectfully submit that Applicants' claims 23-25, 29-30 and 32 are patentable over the cited references.

Claims 23-25, 29-30 and 32 depend from independent claim 21 and therefore incorporate the limitations of claim 21. It is respectfully submitted that Takahashi, UPnP, or Stenberg, for reasons similar to those discussed above, individually or in combination, fail to disclose or suggestion the above noted limitations of claim 21. Thus, Applicants respectfully submit that claims 23-25, 29-30 and 32 are patentable over the cited references.

Claims 27-28 and 36 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Takahashi in view of UPnP, further in view Ward. However, Applicants respectfully submit that Applicants' claims 27-28 and 36 are patentable over the cited references.

Claims 27-28 and 36 depend from independent claim 21 and therefore incorporate the limitations of claim 21. It is respectfully submitted that Takahashi, UPnP, or Ward, for reasons similar to those discussed above, individually or in combination, fail to disclose or suggestion the above noted limitations of claim 21. Thus, Applicants respectfully submit that claims 27-28 and 36 are patentable over the cited references.

Claims 33-35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Takahashi in view of UPnP, further in view Allen. However, Applicants respectfully submit that Applicants' claims 33-35 are patentable over the cited references.

Claims 33-35 depend from independent claim 21 and therefore incorporate the limitations of claim 21. It is respectfully submitted that Takahashi, UPnP, or Allen, for reasons similar to those discussed above, individually or in combination, fail to disclose or suggestion the above noted limitations of claim 21. Thus, Applicants respectfully submit that claims 33-35 are patentable over the cited references.

Claims 41-59 and 61 stand rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent No. 6,005,613 o Endsley et al. (hereinafter "Endsley") in view of UPnP, further in view of US Patent No. 6,353,848 to Morris et al. (hereinafter "Morris"). However, Applicants respectfully submit that Applicants' claims 41-59 and 61 are patentable over the cited references.

Independent claim 41 includes the limitation of "an identification module for automatically identifying the particular host device that the portable device is connected to, including determining a type of physical communication link allowing communication between the portable device and the particular host device." It is respectfully submitted that UPnP, for reasons similar to those discussed above, Endsley or Morris, individually or in combination, do not teach or suggest the noted limitation of claim 41.

Endsley teaches a digital camera connected to a host computer via a USB digital host interface (Endsley, col. 3, lines 8-9, Fig. 1). Endsley also describes the USB hardware and software which provide communication between the host and the camera through USB data transfer model (Endsley, col. 4, lines 20-23, col. 4, lines 64-66). However, nowhere does Endsley disclose or suggest determining a type of physical communication link between a digital camera device and a host device, nor the existence of an identification module to perform such identification.

Morris provides an executable program for accessing a digital camera via a communication network using a Web server on a server computer system and a Web browser on a client computer system that are communicatively coupled via the Internet. (Morris, col. 4, lines 44-50). Morris teaches the camera can be communicatively coupled to the server computer system via the Internet using a dial-up connection to ISP via a POTS line (Morris, col. 7, lines 37-40). Morris teaches the camera coupled to the server computer system via communication line of LAN (Morris, col. 8, lines 1-3). Morris teaches the camera coupled to the server computer system via an input/output port (Morris, col. 8, lines 9-11). Morris teaches an executable program running on a web server receives and accepts a connection request from a camera; receives and reads registration information from the camera; and determines if the camera is supported by the server (Morris, Fig. 7, col. 11, lines 15-40). Morris teaches a camera connects to an executable program and transmits identification name and authentication information electronically to the executable program (Morris, col. 15, lines 10-19). However, Morris does not disclose or suggest determining a type of physical communication link between a digital camera device and a host device.

Further, Endsley is related to a multi-mode digital camera with USB computer interface (Endsley, col. 3, lines 7-9). Morris, however, relates to a method for remotely

accessing a digital camera via a communication link (Morris, col. 1, lines 7-10). There is neither suggestion nor motivation to combine Endsley and Morris.

Therefore, the references, considered as a whole, do not suggest the desirability and thus the obviousness of making the combination. Even in combination, Endsley, UPnP and Morris do not teach or suggest "determining a type of physical communication link between a digital camera device and a host device," and performing certain steps based on the physical communication link type.

As such, in view of the foregoing remarks, it is respectfully submitted that independent claims 41, and thus dependent claims 42-59 and 61 are patentable over Endsley, UPnP and Morris.

Claim 60 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Endsley in view of UPnP, further in view of Morris, and further in view of US Patent No. 6,529,969 to Inoue (hereinafter "Inoue"). However, Applicants respectfully submit that applicants' claim 60 is patentable over the cited references.

Claim 60 depends on claim 41, which includes the limitation of "an identification module for automatically identifying the particular host device that the portable device is connected to, including determining a type of physical communication link allowing communication between the portable device and the particular host device." It is respectfully submitted that Endsley, UPnP, Morris or Inoue, individually or in combination, fail to disclose or suggestion the above noted limitation.

As discussed above, none of Endsley, UPnP and Morris teach or suggest an identification module which determines a type of physical communication link allowing communication between the portable device and the particular host device. Inoue does not remedy this shortcoming of the references.

Rather, Inoue provides a reception apparatus and a reception method by which selection of an audio source through an IEEE 1394 bus can be performed by simple and plain operation (Inoue, col. 2, lines 46-50). Inoue teaches a point to point-connection as a form of connection wherein a relationship between a transmission apparatus and a reception apparatus is specified as a plug and data transmission is performed between the transmission apparatus and the reception apparatus using a common channel (Inoue, col. 17, lines 8-12). Inoue also

describes the plug connection is established with a Plug control Register provided in an address space in the apparatus (Inoue, col. 17, lines 32-34). However, nowhere does Inoue disclose or suggest determining a type of physical communication link between a digital camera device and a host device.

Therefore, it is respectfully submitted that independent claim 41, and therefore its dependent claim 60, is patentable over Endsley, UPnP, Morris and Inoue.

Claim 62 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Endsley in view of UPnP, further in view of Morris and further in view of US Patent No. 6,606,669 to Nakagiri. However, Applicants respectfully submit that Applicants' claim 62 is patentable over the cited references.

Claim 62 depends from and includes all the limitations of independent claim 41. It is respectfully submitted that Endsley, UPnP, Morris, for reasons similar to those discussed above, or Nakagiri, individually or in combination, do not teach or suggest the above noted limitations of claim 41.

Nakagiri provides an information processing apparatus constructed by a host computer and a peripheral device connected to the host computer through a bidirectional interface and which inputs and outputs data between the host computer and the peripheral device through a device driver that corresponds to the peripheral device is loaded in the OS of the host computer (Nakagiri, col. 2, lines 24-31). Nakagiri teaches a printer reads out data transmitted through a bidirectional interface and proceeds by transmitting a printer identification data, transmitting a printer driver, or executing ordinary printing, according to a check made on the data (Nakagiri, col. 5, lines 42-65, Fig. 3). Nakagiri describes the data could be a port identification data request, a printer driver transmission command, or an ordinary print control command (Nakagiri, col. 5, lines 61-65). Nakagiri discloses a relative simple format, like a predetermined escape sequence, is used for the identification data request command (Nakagiri, col. 5, lines 44-53). However, Nakagiri fails to disclose or suggest an identification module which determines a type of physical communication link allowing communication between the portable device and the particular host device.

Therefore, claim 41, and thus its dependent claim 62, is patentable over Endsley, UPnP, Morris and Nakagiri.

In view of the foregoing amendments and remarks, applicant respectfully submits the applicable rejections and objections have been overcome. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call the undersigned attorney at (408) 720-8300.

Please charge Deposit Account No. 02-2666 for any shortage of fees in connection with this response.

Respectfully submitted,

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